



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,319	01/22/2004	Howard E. Rhodes	M4065.0107/P107-F	2671
24998	7590	04/02/2009	EXAMINER	
DICKSTEIN SHAPIRO LLP			CHEN, CHIA WEI A	
1825 EYE STREET NW			ART UNIT	PAPER NUMBER
Washington, DC 20006-5403			2622	
MAIL DATE		DELIVERY MODE		
04/02/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/761,319	RHODES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHIA-WEI A. CHEN	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 January 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 70-79 and 120-130 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 70-79 and 120-130 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 12 January 2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of June 16, 2019 has been reviewed and is NOT accepted.

The application/patent being disclaimed has been improperly identified since the number used to identify the patent being disclaimed is incorrect. The correct number is US Pat No. 6,310,366.

### ***Response to Arguments***

2. Applicant's arguments, see Appeal Brief, filed 15 January 2009, with respect to the rejections of claims 70-79 and 120-130 under 35 USC § 103 have been fully considered and are persuasive. However, the Double Patenting rejections have been sustained due to the improper Terminal Disclaimer filed 12 January 2009. The finality of the Final Rejection mailed 16 May 2008 has been withdrawn.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 70-79 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 36-79 of U.S. Patent No. 6,310,366. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims are broader in every aspect than the patent claim and is therefore an obvious variant thereof.

5. Claims 120-130 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 20-35 of U.S. Patent No. 6,310,366 in view of Fossum (U.S. Patent No. 5,471,515).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 120 is generic and only further discloses an active pixel sensor structure that is well known in the art.

Claim 120, U.S. Patent No. 6,310,366 claim 20 discloses an imager comprising:  
an array of pixel sensor cells formed in a retrograde well in a substrate, the retrograde well being doped with a vertically graded dopant concentration, wherein each of said pixel sensor cells is separated by an isolation region that electrically isolates said pixel cells from each other, and each said pixel sensor cell comprising comprises:  
a photoconversion device;  
but is silent regarding:

a reset transistor;  
a source follower transistor;  
a row select transistor; and  
a floating diffusion region in electrical communication with said photoconversion device and said source follower transistor.

Fossum teaches a reset transistor (45); a source follower transistor (55); a row select transistor (60); and a floating diffusion region (40) in electrical communication with said photocoversion device and said source follower transistor (Fig. 1; col. 3, lines 7-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the Active Pixel Sensor structure of Fossum with the imager of U.S. Patent 6,310,366 to form an imager that consumes less power and has less image lag than a typical CMOS imager.

***Allowable Subject Matter***

6. Claims 70-79 and 120-130 are allowable once a proper Terminal Disclaimer is submitted.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-WEI A. CHEN whose telephone number is (571)270-1707. The examiner can normally be reached on Monday - Friday, 7:30 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan V Ho/  
Primary Examiner, Art Unit 2622

/C. A. C./  
Examiner, Art Unit 2622